

REMARKS

Applicant submits that claims 1-5, 8, 9, 11-14, 16-21, 23 and 26-30 are currently pending in this application. In the Office Action mailed November 20, 2006, the Examiner rejected claims 1-5, 11-14, 16-21 23, 26-30, and objected to claims 8 and 9. In this Response to the Office Action, Applicant has amended claims 1, 16, and 23 (in compliance with the Examiner's recommendations and for aesthetic purposes), and has added claims 31-33.

Reconsideration of the currently pending and newly added claims based on the preceding amendments and the following remarks is respectfully requested. For ease of reference, the Examiner's comments from the Office Action are reprinted below in 10-point bold type and are followed by the Applicant's remarks.

Claim Rejections – 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied to establishing a background for determining obviousness under 35 U.S.C. 103(A) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1, 3, 11, 14, 16, 18, 19, [23,] 29, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brandt (US 1,889,592) in view of Kelley (US 2,340,597).

With regard to claims 1, 16 and 23, Brandt discloses a slip puller apparatus, having a slip base (2), a pulling mechanism (25 and 27), or connecting means, pivotally attached to the slip base, wherein the pulling mechanism has top and bottom arms exhibiting parallelogram geometry. Brandt further teaches slips (32), or gripping means, connected to the pulling mechanism, and a cylinder (22), or manipulating means, connected to the pulling mechanism and adapted to move the pulling

mechanism between an activated and deactivated position. No part of the pulling mechanism or the cylinder ever extends outside of the boundary of the slip base.

Brandt fails to disclose the slip base being mounted on a rotary table.

Kelley discloses a slip puller apparatus having a slip base (2) mounted on a rotary table (4). The slip base of Kelley is within the boundary of the rotary table.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have mounted the slip puller apparatus of Brandt on a rotary table, as such a configuration was well known in the art, as evidenced by Kelley. Furthermore, if the slip puller of Brandt was mounted on a rotary table via the slip base as taught by Kelley, then the slip base, pulling mechanism, and cylinder would have been within the boundary of the rotary table.

With regard to claims 3 and 18, neither Brandt nor Kelley discloses connecting the slip base to the rotary table with magnets. However, it would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified Brandt in view of Kelley so that the slip base would have been connected to the rotary table with magnets, since the examiner takes Official Notice of the equivalence of bolts and magnets for their being used to connect elements of a slip device to the rotary table. The selection of any of these known equivalents to connect the slip base to the rotary table would have been within the level of ordinary skill in the art. Further, it would have been an obvious matter of design choice to use magnets to connect the slip base to the rotary table, since applicant has not disclosed that using magnets solves any stated problem or is for any particular purpose and it appears that the invention would have functioned equally well with bolts or magnets.

With regard to claims 11, 19 and 29, the top and bottom arms of Brandt exhibit a parallelogram geometry in the activated and deactivated positions.

With regard to claims 14 and 30, no portion of the slip puller apparatus of Brandt in view of Kelley is outside of the boundary of the rotary table in the activated or deactivated position.

With regard to the Examiner's rejection of claims 1, 3, 11, 14, 16, 18, 19, 23, 29, and 30 under 35 U.S.C. § 103(a) as being unpatentable over Brandt (U.S. Pat No. 1,889,592) in view of Kelley (U.S. Pat No. 2,340,597), Applicant respectfully traverses that rejection as follows:

Claims 1, 3, 11, 14, 23, 29, and 30 of the present Application each require a "cylinder," wherein no portion of the required "cylinder" is outside the boundary of the rotary table. As described in the specification of the present Application, "[t]he slip cylinders can be hydraulic, pneumatic, or similar-type cylinders." *See* Specification at pg. 5, lns. 16-17.

In the Office Action (relevant portions of which are reproduced above), the Examiner states that Brandt discloses a "cylinder," as shown in Brandt by reference numeral 22. However,

rather than disclosing a “cylinder” as required by the present claims, Brandt actually discloses a manual “lever,” as clearly shown in Figure 1, and as confirmed by the following excerpt:

A lever 22 is rigidly secured on said shaft outward of the boss, and said lever is pivotally connected by a link 23 to a depending crank arm 24 rigidly secured upon the shaft 14 at the diagonally opposite corner of the frame from boss 20, the arrangement being such that movement of the lever 22 to rotate said shaft 10 will impart simultaneous rotation in the same degree to the shaft 14 equipped with said crank arm.

Brandt, col. 2, lns. 30-40 (emphasis added).

Applicant respectfully asserts that a manually-operated “lever” as disclosed in Brandt is not analogous to the hydraulic, pneumatic, or similar-type “cylinder” as described and claimed in the present Application.¹ Moreover, there is no teaching or suggestion in Brandt that a hydraulic, pneumatic, or similar-type “cylinder” could be substituted for the disclosed “lever,” or that such a strained substitution would even function properly. Accordingly, as the combination of Brandt and Kelley fails to disclose at least one of the required limitations of claims 1, 3, 11, 14, 23, 29, and 30 (namely, the limitation requiring a “cylinder,” wherein no portion of the required “cylinder” is outside the boundary of the rotary table), the combination of Brandt and Kelley fails to render obvious those claims under 35 U.S.C. § 103.

Similarly, with regard to the Examiner’s rejection of claims 16, 18, and 19 under 35 U.S.C. § 103(a) as being unpatentable over Brandt (U.S. Pat No. 1,889,592) in view of Kelley (U.S. Pat No. 2,340,597), Applicant respectfully traverses that rejection as follows:

Claims 16, 18, and 19 of the present Application each require “manipulating means,” wherein no portion of the required “manipulating means” is outside the boundary of the rotary table. Properly construed, the “manipulating means” limitation of claims 16, 18, and 19 is

¹ In fact, the Examiner’s statement in a subsequent rejection evidences the fact that Brandt does not disclose a hydraulic or pneumatic cylinder. Specifically, in rejecting claims 4, 5, 13 and 21 under 35 U.S.C. § 103(a), the

analogous to the “cylinder” limitation of claims 1, 3, 11, 14, 23, 29, and 30. Therefore, as the combination of Brandt and Kelley fails to disclose a “cylinder,” wherein no portion of the required “cylinder” is outside the boundary of the rotary table (as shown above), the combination of Brandt and Kelley also fails to disclose “manipulating means,” wherein no portion of the required “manipulating means” is outside the boundary of the rotary table. Accordingly, for the same reasons as noted above with regard to the “cylinder” limitation (namely, that the combination of Brandt and Kelley fails to disclose at least one of the required limitations of the rejected claims), the combination of Brandt and Kelley fails to render obvious claims 16, 18, and 19 of the present Application under 35 U.S.C. § 103.

As such, Applicant respectfully suggests that claims 1, 3, 11, 14, 16, 18, 19, 23, 29, and 30 of the present Application are all in condition for allowance.

6. Claims 2 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brandt in view of Kelley as applied to claim 1 above, and further in view of Baugh (US 4,269,277).

With regard to claims 2 and 17, Brandt in view of Kelley discloses all the limitations of the above claims, except for the slip base being attached to the rotary table via Kelly bushing receptacles.

Baugh discloses a power slip assembly. Baugh further teaches a “base collar...equipped with throughbores by which the entire power slip assembly may be bolted to, for example, the framework of a fluid pressure drive assembly of a snubbing device, to a well workover rig, or to some other support means” (column 11, line 49). It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have bolted the slip bowl of Brandt in view of Kelley to the rotary table using the throughbores (or Kelly bushing receptacles) of Baugh, in order to have formed a strong, releasable connection between the slip bowl and the rotary table.

With regard to the Examiner’s rejection of claims 2 and 17 under 35 U.S.C. § 103(a) as being unpatentable over Brandt (U.S. Pat No. 1,889,592) in view of Kelley (U.S. Pat No.

Examiner states that “Brandt discloses a lever (22) which operates the slip puller, but Brandt fails to disclose the slip puller being operated via a hydraulic or pneumatic cylinder.” Office Action at pg. 5.

2,340,597), and further in view of Baugh (U.S. Pat No. 4,269,277), Applicant respectfully traverses that rejection as follows:

The Examiner's rejection of claims 2 and 17 relies on the incorrect assertion that the combination of Brandt and Kelley discloses all of the limitations of independent claims 1 and 16. As shown above, the combination of Brandt and Kelley fails to disclose at least one of the required limitations of claims 1 and 16 (namely, the limitation requiring a "cylinder" or "manipulating means," wherein no portion of the required "cylinder" or "manipulating means" is outside the boundary of the rotary table). As the additional reference (i.e., Baugh) does not disclose this missing limitation, dependent claims 2 and 17, which depend from independent claims 1 and 16, respectively, are not rendered obvious under 35 U.S.C. § 103 by the alleged combination of Brandt, Kelley, and Baugh.

As such, Applicant respectfully suggests that claims 2 and 17 of the present Application are both in condition for allowance.

7. Claims 4, 5 13, 21, and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brandt in view of Kelley and Moore (US 2,545,627).

Brandt discloses a lever (22) which operates the slip puller, but Brandt fails to disclose the slip puller being operated via a hydraulic or pneumatic cylinder.

Kelley states that the "lever...may be replaced by other suitable and conventional pneumatic or mechanical lever devices of a character well understood in the art," which would appear to encompass a hydraulic cylinder as well.

Moore discloses a hydraulic slip lifter apparatus in which the hydraulic lines that control the lifting mechanism are routed to a control valve located at a remote point, "close to where the driller will stand."

'It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have substituted the hydraulic or pneumatic cylinder of Kelley in place of the mechanical lever of Brandt, in order to have provided an automated way of operating the slip puller, which would have enhanced operator safety because the apparatus could have been activated via remote control, as shown by Moore.

With regard to the Examiner's rejection of claims 4, 5, 13, 21, and 26-28 under 35 U.S.C. § 103(a) as being unpatentable over Brandt (U.S. Pat No. 1,889,592) in view of Kelley (U.S. Pat No. 2,340,597) and Moore (U.S. Pat No. 2,545,627), Applicant respectfully traverses that rejection as follows:

The Examiner's rejection of claims 4, 5, 13, 21, and 26-28 relies on the incorrect assertion that the combination of Brandt and Kelley discloses all of the limitations of independent claims 1, 16, and 23. As shown above, the combination of Brandt and Kelley fails to disclose at least one of the required limitations of claims 1, 16, and 23 (namely, the limitation requiring a "cylinder" or "manipulating means," wherein no portion of the required "cylinder" or "manipulating means" is outside the boundary of the rotary table). There is no teaching or suggestion in Brandt that a hydraulic, pneumatic, or similar-type "cylinder" could be substituted for the disclosed manually-operated "lever," or that such a strained substitution would even function properly. As the additional reference (i.e., Moore) does not suggest such a substitution, or that such a substitution would even be functional, dependent claims 4, 5, 13, 21, and 26-28, which depend respectively from independent claims 1, 16, and 23 are not rendered obvious under 35 U.S.C. § 103 by the alleged combination of Brandt, Kelley, and Moore.

As such, Applicant respectfully suggests that claims 4, 5, 13, 21, and 26-28 of the present Application are all in condition for allowance.

8. Claims 12 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brandt in view of Kelley as applied to claims 1 and 16 above, and further in view of Broussard (US 4,450,606).

Brandt in view of Kelley fails to disclose the encasing of the pulling mechanism within a protective sheath.

Broussard discloses a slip elevator device. Broussard further teaches the use of a "protective housing," which encases the "working mechanism" (the pulling mechanism) of Broussard's invention (column 7, line 27).

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have included the protective sheath of Broussard with the pulling mechanism of Brandt in view of Kelley, in order to have “discourage[d] the entry of dust, drilling mud or other abrasive material to the working mechanism” (Broussard, column 7, line 29).

With regard to the Examiner’s rejection of claims 12 and 20 under 35 U.S.C. § 103(a) as being unpatentable over Brandt (U.S. Pat No. 1,889,592) in view of Kelley (U.S. Pat No. 2,340,597), and further in view of Broussard (U.S. Pat No. 4,450,606), Applicant respectfully traverses that rejection as follows:

As with the Examiner’s rejection of claims 2 and 17, the Examiner’s rejection of claims 12 and 20 relies on the incorrect assertion that the combination of Brandt and Kelley discloses all of the limitations of independent claims 1 and 16. As shown above, the combination of Brandt and Kelley fails to disclose at least one of the required limitations of claims 1 and 16 (namely, the limitation requiring a “cylinder” or “manipulating means,” wherein no portion of the required “cylinder” or “manipulating means” is outside the boundary of the rotary table). As the additional reference (i.e., Broussard) does not disclose this missing limitation, dependent claims 12 and 20, which depend from independent claims 1 and 16, respectively, are not rendered obvious under 35 U.S.C. § 103 by the alleged combination of Brandt, Kelley and Broussard.

As such, Applicant respectfully suggests that claims 12 and 20 of the present Application are both in condition for allowance.

Allowable Subject Matter

9. Claims 8 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant appreciates the Examiner’s finding that claims 8 and 9 would be allowable if rewritten in independent form including all limitations of the base claim and any intervening

claims. However, as demonstrated above, Applicant respectfully asserts that claims 8 and 9 depend from a valid base claim (namely, claim 1). Accordingly, Applicant respectfully suggests that claims 8 and 9 of the present Application are both in condition for allowance.

CONCLUSION

Applicants respectfully submit that the pending and added claims are in condition for allowance, and respectfully request the allowance of these claims. The Examiner is invited to contact the undersigned attorney at 713.787.1446 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,



Tyler T. VanHoutan
Reg. No. 54,506
Howrey LLP
1111 Louisiana St., 25th Floor
Houston, Texas 77002

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ATTORNEY FOR APPLICANT